DRAFT

Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment for the August 10, 1993 Tampa Bay Oil Spill,

Volume I – Ecological Injuries

July 1, 2002

PREPARED BY

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
AND
U.S. DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE

1.0 INTRODUCTION

This document is a Draft Supplement to part one (Volume I) of the Final Damage Assessment and Restoration Plan and Environmental Assessment, June 1997, (DARP/EA Vol. I), developed by State and Federal natural resource Trustees to address the injury, loss or destruction of natural resources resulting from the August 10, 1993, oil spill in Tampa Bay, Florida (hereafter, the Spill). The supplement is needed to provide for additional action alternatives which may be used to restore beach sand to address the beach sand injury identified in Section 4.9 of the Final DARP/EA, pp 77-81, using natural resource damages which the Trustees have recovered for that loss.

1.1 Authority

This Draft Supplement to the DARP/EA Vol. I has been prepared jointly by the Florida Department of Environmental Protection (DEP), the National Oceanic and Atmospheric Administration (NOAA) of the United States Department of Commerce, and the United States Department of the Interior, acting through the U. S. Fish and Wildlife Service (DOI/USFWS) (hereafter, the Trustees) pursuant to their respective authorities as Trustees for natural resources injured as a result of the Spill, including under the Oil Pollution Act (OPA), 33 U.S.C. § 2701 *et seq.*, the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*., and other applicable laws. In addition, DEP is acting pursuant to authority provided by Chapters 376, Florida Statutes, and other applicable provisions of State law.

1.2 Need and Purpose

On August 10, 1993, approximately 32,000 gallons of mixed light fuels and 330,000 gallons of #6 fuel oil were discharged into the Tampa Bay environment following collisions involving three vessels - the tank barge "OCEAN 255", the tank barge "B-155" and the freighter "BALSA 37" - just south of Mullet Key near the entrance to Tampa Bay, Florida. The spill and/or associated response actions resulted in injury to a variety of natural resources, including birds, sea turtles, mangroves, seagrasses, salt marshes, oyster beds, surface waters, sediments and beaches, and significantly disrupted the use of area waterways, beaches and shellfish beds for public recreation. The physical loss of beach sand is one of nine types of natural resource injuries identified and assessed by the Trustees in the DARP/EA Vol. I[1].

The physical loss of beach sand occurred as a result of necessary response actions. Much of the oil involved in the Spill eventually stranded on about 13 linear miles of the beaches on the Pinellas County barrier islands and cleanup of the oil on these beaches resulted in the removal of an estimated 39,827 cubic yards of oiled sand. As specified in Section 4.9 of the

[1] Lost human uses of natural resources were also addressed in the damage assessment process for the spill. These losses are addressed in the Final Restoration Plan and Environmental Assessment, Volume 2 – Human Use and Recreational Injuries, released by the Trustees in November 2000.

DARP/EA Vol. I, damages for the physical loss of beach sand were assessed based on cost of replacing the same volume of beach sand as was removed. DEP estimated this cost to be $10 per cubic yard from available information regarding the incremental cost to replace additional sand (equivalent to the volume lost) as part of a routine public sand nourishment project in the affected area. Damages for the physical sand loss were thus assessed at $398,000.00. The Trustees recovered these damages in May 1999 as part of a comprehensive settlement of State and Federal claims arising from the Spill.

A restoration plan addressing the physical sand loss and governing use of the recovered damages is included in the DARP/EA Vol.I at Section 4.9.6. In that section, only one restoration alternative was selected for use to achieve sand replacement[2]. The direct replacement of beach sand with offshore dredged sand, through augmentation of a current or future local, permitted beach nourishment project. The Trustees previously approved augmentation of one beach nourishment project at Blind Pass consistent with this restoration plan, and $200,000.00 of the damages recovered were paid to DEP at settlement as reimbursement of the costs of that action. With respect to the remaining $198,000.00, the Trustees have diligently searched but have not found another restoration project opportunity consistent with Section 4.9.6. All identified nourishment plans for area beaches have sources of necessary funds identified and/or are already planned at capacity. Consultations with Pinellas County have identified no unfunded projects for the next 10 years. Further, the amount of the remaining funds is insufficient to support a full project, as nourishment projects which use offshore dredged sand typically cost several million dollars. Therefore, to provide for use of the remaining beach sand restoration funds consistent with OPA, the Trustees find it necessary to identify other restoration actions appropriate to beach sand restoration.

1.3 Public Participation

This Draft Supplement to DARP/EA Vol. I represents a proposed amendment to Section 4.9.6 of the DARP/EA Vol. I and, as such, will be made available for public review and comment for 30 days. Members of the public wishing to propose other restoration alternatives or specific restoration projects, which are consistent with the restoration objective, are invited to do so. Municipalities or individuals wishing to propose other restoration alternatives or projects should include information addressing the selection criteria set forth in Section 2.1 and indicate whether they are eligible for outside match funding. All comments received during the public comment period will be considered by the Trustees before finalizing this supplement, including the

---

[2] Sand replacement was considered as primary restoration in the DARP/EA Vol. I. The restoration plan for the beach sand loss in DARP/EA Vol. 1 also considered the need for compensatory restoration action, i.e, restoration which would compensate for interim loss of physical services (e.g. erosion control) pending sand replacement. However, in this instance the Trustees found the beach sand loss was unlikely to diminish the storm protection provided by the beaches or to contribute to beach erosion and, on that basis, selected the No Action Alternative. The decision not to undertake restoration to compensate for interim service losses is not being revisited in this Draft Supplement and remains final.

restoration alternatives selected to revise Section 4.9.6 of the DARP/EA Vol. I and the restoration projects identified for funding thereunder.

The deadline for written comments on this Draft Supplement will be 30 days following the date of publication of a notice announcing its availability for public review and comment in the St. Petersburg Times.

1.4 Administrative Record

Records documenting information considered, and actions taken by the Trustees in planning for and implementing restoration, including development of this Draft Supplement to the DARP Vol. I, are included in an Administrative Record (AR) being maintained by the Trustees. Background information, including any public comments submitted on this Draft Supplement and the Final Supplement, are included in this AR as received or completed. These records facilitate public participation in the restoration planning process. Interested persons can access or view these records at the offices of:

John Iliff
National Oceanic and Atmospheric Administration
Restoration Center - Southeast Region
9721 Executive Center Drive North, Suite 114
St. Petersburg, Florida 33702
727-570-5391

Arrangements must be made in advance to review the record, or to obtain copies of documents in the record, by contacting the person listed above. Access to and copying of documents in the record are subject to all applicable laws and policies, including but not limited to laws and policies relating to copying fees and the reproduction or use of any material which is copyrighted.

2.0 RESTORATION PLANNING PROCESS

The DARP/EA Vol. I identifies the Trustees= strategy and framework for identifying preferred restoration actions to address resource injuries (Section 3.0), and defines the scope of the beach resource injury for assessment and restoration planning purposes (Section 4.9). Under the DARP/EA Vol. I, the injury to the beach resource is limited to the physical loss of beach sand due to the cleanup of oil from the beaches. Consistent with this narrowly defined injury, the restoration plan at Section 4.9.6 considers actions necessary to replace the lost sand. These elements continue to apply and are the foundation for the revised restoration plan described herein.

The DARP/EA Vol. I also provides information on the relevant environmental setting which is applicable to consideration of the restoration alternatives identified herein. That information provides the foundation for the Trustees= evaluation of the potential environmental consequences of these restoration alternatives.

2.1 Restoration Selection Criteria

In revising the restoration plan for this injury, the Trustees applied the following general criteria from the DARP/EA Vol. I, to the assessed injury to the beach resource, in order to evaluate additional restoration alternatives and identify the actions preferred to address the physical injury to the beach resource in revising the restoration plan for this injury:

Relationship to assessed injury- Considers the nature and extent to which a restoration action would address the natural resource injuries that occurred as the result of the spill, including those resulting from response actions. This includes the extent to which benefits of the action would be on-site, in-kind, or would be otherwise comparable in nature, scope, degree and location to injuries that occurred.

Relationship to natural recovery - Considers the extent to which implementation of a given restoration alternative would reduce the time it takes an injured resource to recover to baseline and the ability of the resource to recover with or without alternative actions.

Consistency with restoration objectives - Considers the extent to which a given approach to restoration achieves restoration objectives identified for the injured resource.

Consistency with community objectives- Considers the degree to which a given restoration alternative is consistent with objectives for protection or enhancement of natural resources in the impacted watershed which are the subject of community-wide consensus. Such objectives may be found in the National Estuary Program's Comprehensive Conservation and Management Plans or other community-based planning documents for the impacted watershed.

Technical feasibility- Considers both the likelihood that a given restoration action will succeed in a reasonable period of time, and the availability of technical expertise, programs and contractors to implement the considered action. This factor includes, but is not limited to, consideration of

prior experience with methods or techniques proposed for use, availability of equipment and materials, site availability and logistical difficulty.

Site requirements - Considers and compares the extent to which physical, biological or other scientific requirements of proposed restoration actions can be met by available sites.

Potential for additional natural resource injury- Considers the risk that a proposed action may aggravate or cause additional natural resource injuries.

Multiple benefits- Considers the extent to which a given restoration action will address more than one natural resource injury or loss.

Sustainability of a given restoration action- Considers the vulnerability of a given restoration action to natural or human-induced stresses following implementation, and the need for future maintenance actions to achieve restoration objectives.

Consistency with policies and compliance with law- Considers the extent to which the action is consistent with relevant Federal and State policies and complies with Federal and State laws.

Cost of restoration - Considers the relationship of costs associated with a given restoration alternative to the benefits of that alternative and the ability to achieve restoration objectives. Other factors being substantially equal, the Trustees give preference to the less costly restoration approach.

3.0 PHYSICAL LOSS OF BEACH SAND - PROPOSED REVISED RESTORATION PLAN

As noted in Section 1.2, the Trustees have been unable to find beach nourishment project opportunities consistent with the original restoration plan, in large part due to the adequacy of funding for known projects. As a result, the restoration alternatives proposed herein include actions which will either actively replace beach sand or which will avoid or prevent future sand losses.

This section describes the range of restoration alternatives identified and evaluated by the Trustees in developing a revised restoration plan to provide for beach sand restoration. The alternatives considered include some alternatives considered in developing the DARP/EA Vol I. Based on their evaluation of these alternatives, the Trustees have identified the following restoration alternatives as preferred for use in revising the restoration plan:

- **$** Beach Sand Replacement Using Offshore Dredged Sand (Previously Selected Action)
- **$** Restoration of Dune Vegetation
- **$** Dune Management Activities

The range of restoration alternatives evaluated by the Trustees and the rationale supporting the choice of the above alternatives as preferred is presented in subsections 3.1-3.4. In accordance with NEPA, the ANo Action@ alternative is also considered.

Section 3.5 identifies two restoration project proposals which are currently known to the Trustees and eligible for funding consideration under the preferred restoration alternatives identified in this Draft Supplement. The remaining damages recovered for the lost beach sand are sufficient to allow for implementation of both these projects. Additional restoration alternatives or project proposals, however, may be identified during the period for public review of this document. Therefore, the Trustees are deferring selection of specific projects for implementation until after public review to ensure project selections are consistent with the restoration plan revisions approved in the Final Supplement and allow for consideration of any other restoration project options. Project selection decisions will be described in the Final Supplement. In making project selections consistent with the revised restoration plan approved in the Final Supplement, the Trustees are afforded discretion, as they are required to balance many factors in choosing that project or set of projects which provides the greatest overall benefit to the public consistent with the primary objective of this restoration plan. Further, flexibility is necessary to adjust to practical considerations, such as the remaining funds available for project implementation, expected versus actual future costs, timing and feasibility. Absent the identification of additional restoration alternatives or project proposals during the period for public review of this document, the projects identified in Section 3.5 will be selected.

3.1 Preferred Alternative: Beach Sand Replacement Using Offshore Dredged Sand (Previously Selected Action)

This is the restoration alternative selected in the DARP/EA Vol. I. The alternative

involves direct placement of sand on injured beaches with sand obtained by augmenting current or future, local and permitted beach nourishment projects. Although the Trustees have been unable to identify an available project to date, the alternative remains potentially viable.

3.1.1 Evaluation of Alternative

Augmenting current or future beach nourishment projects would directly replace the volume of sand that was lost during the oil spill cleanup and achieves the restoration objective. Because beach nourishment projects are routinely implemented in Pinellas County, the alternative is technically feasible. Because the cost of implementing a complete beach nourishment project greatly exceeds the limited beach sand restoration funds remaining, augmentation of a current or future beach nourishment project presents the only cost-feasible means of using offshore dredged sand for sand replacement. The alternative poses some short-term resource impacts, as described in Section 3.1.2, but these impacts are short-lived and are typically avoided or minimized through permit conditions. Project sustainability is a significant concern under this alternative as, depending on location and other site conditions, sand placed on a nourished beach can remain for anywhere from a just a few months to several years. Where project benefits would be short-term, use of this alternative would not be cost-effective. Nonetheless, this alternative remains a potentially viable and cost-effective means of restoring lost beach sand where restoration benefits are likely to be longer term.

3.1.2 Ecological and Socio-Economic Impacts

Replacement of beach sand with dredged sand would have impacts on the physical and biological environment, at both the offshore dredging site and at the beach. The beach profile would be elevated, which increases storm and erosion protection to structures or habitats landward of the beach face. Beach fauna, such as coquina bivalves (*Donax variabilis*) and Ghost crabs (*Ocypode quadrata*), and other burrowing organisms found in the sand, such as the small shrimp-like amphipod (*Ampelisca abdita)* would be subject to burial. Burrowing organisms likely will survive and adapt to burial to some degree; moreover, any adverse impacts to these biological communities are typically short-lived, because nearby populations of these organisms migrate into the nourished beach or quickly repopulate the affected areas due to their high fecundity. Construction activities will also temporarily displace foraging of shore birds in the immediate area, but the effect is temporary and is not likely to adversely affect any birds due to the abundance of alternative beach foraging areas.

Sea turtle nesting can be affected by coastal construction activities. Heavy machinery can destroy nests or can compact beach sand, making it unsuitable for nesting. Emerging nestlings can become disoriented by lighting impacts. In the context of beach nourishment projects, these types of impacts are normally addressed through State and Federal permitting processes, which seek to eliminate or minimize these risks through conditions applied to construction methods or timing (e.g., construction permitted only in non-nesting periods).

Impacts to historical or cultural resources of the State are not anticipated, as the beaches targeted for nourishment in Pinellas County have generally been the subject of, and disturbed by,

previous construction or nourishment projects, and there are no known historical or archaeological resources present on these sites. Public use of a beach site is excluded during nourishment activities. Noise and some air pollution are expected when heavy machinery is used to grade the sand pumped onto the beach from offshore. These disturbances are temporary and generally minimal.

3.2 Preferred Alternative: Restoration of Dune Vegetation

This alternative involves planting of native dune vegetation, such as sea oats, as a means of promoting natural dune development and replacing lost beach sand over time. Sea oats are long-stemmed grasses that grow on sand dunes. These and other native dune plants with above- and below-ground plant structure help to capture windblown sand and deposit it back onto the dunes and beach, and to anchor and stabilize dunes. This alternative represents a mechanism (i.e., vegetation) for accelerating what is otherwise a long-term natural process for returning sand to beaches through accretion. Potential planting sites would include areas where new vegetation is required to replace that lost due to pedestrian traffic or other recreational uses or where additional erosion protection is desired.

3.2.1 Evaluation of Alternative

Dune vegetation planting can occur at the beaches where the sand loss occurred, so that the benefits of this passive means of sand replacement occur at the site of the original losses. It is a restoration alternative with few potential adverse consequences. The alternative would achieve the restoration objective of beach sand replacement, although it will occur incrementally, and over a long period of time. Several beach municipalities support or encourage the planting of native dune vegetation and report that volunteer groups in the community are actively engaged in sea oat plantings. The City of Treasure Island has proposed a planting project immediately south of the Sunset Vista Trailhead Park (currently under development) involving dune shaping and planting. There may be other areas with the capacity to sustain dune vegetation projects within the affected beach communities. Dune vegetation projects are technically feasible; indeed, they are relatively simple projects, with few design or site preparation requirements. The projects are self-sustaining, as dune vegetation generally needs little care after initial planting.

Dune vegetation provides numerous immediate benefits and services to other resources such as nesting habitat for shore birds and recreational services and aesthetic enjoyment for humans. A developing dune community will reduce ongoing sand erosion and provide increased storm protection to structures behind them. Planting dune vegetation is a cost-effective alternative for replacing beach sand as the projects have few and relatively simple plan requirements, the materials needed are inexpensive and readily available, volunteer labor can be effectively used to install plants, and there are few permitting requirements. Sea oat planting project estimates available to the Trustees during development of a separate restoration plan for this Spill[3] generally ranged from $30,000 to $50,000. The Treasure Island project proposal noted above has a cost estimate of approximately $60,000.

3 The Final Restoration Plan and Environmental Assessment, Volume 2 – Human Use and Recreational Injuries, released November 2000.

3.2.2 Ecological and Socio-Economic Impacts

Planting native dune vegetation will have no negative or minimal negative environmental consequences. Planting is usually done by hand. If heavy machinery is used to shape planting areas, it will be done during the day and in a manner that avoids disturbing turtles and birds. Current planting guidelines and accepted project practices require that planting material be purchased from a nursery which can document that the planting stock is genetically similar to, or originates from, seed stock which is from the dune vegetation community where planting is to occur. Following these guidelines and practices should ensure the genetic integrity of the beach dune community is maintained. Increasing dune vegetation through planting should have positive benefits to the bird populations that rely on dune communities for habitat. Species such as the piping plover are likely to benefit from these actions.

The planting of dune vegetation may displace or eliminate recreational use of some small areas of beach surface, but any surface areas lost to dune vegetation will be extremely small in relation to the total beach area available for recreational use in the affected communities. Further, the planting of native dune vegetation contributes to the natural landscape, which is a more aesthetically pleasing and popular landscape to many recreational beach goers. The benefits to recreational beach goers will offset any potential impact, due to the small reduction in available beach area. This alternative will not have any other socio-economic impacts.

3.3 Preferred Alternative: Dune Management Activities

This alternative involves actions which mitigate human use and/or ecological impacts to dune communities, promote natural dune recovery and formation, and facilitate replacement of beach sand through natural accretion. Such actions could include, but are not limited to construction of dune walkovers, educational signage, designation of restricted areas, and removing invasive exotic species (vegetation) found locally along some recreational beaches[4]. These activities are often paired or done in concert with seeding or replanting barren areas with native vegetation as described in Section 3.2. Such actions are generally implemented to curb impacts caused to dune habitats by humans (i.e., foot traffic) in high use areas, or by other conditions which contribute to the destruction of dune habitats and sand loss. Preventing such access or carefully channeling pedestrian traffic via walkovers, allows dune habitats to recover and accrete sand.

3.3.1 Evaluation of Alternative

Dune management activities can be implemented in areas of documented dune habitat and

4 Exotic vegetation, Australian pine (*Casuarina equisetifolia*) in particular, often displaces the native dune vegetation which naturally accumulates sand and builds dunes. As they grow, Australian pines shade out native dune vegetation and over time develop a root system that degrades the nesting habitat service that sand dunes provide to sea turtles by creating a physical obstruction during excavation of a nest cavity. Importantly, the Australian pine root systems de-stabilize the existing dunes and promote sand erosion. Eradicating Australian pine from an infested dune area is often the first step in dune restoration.

sand loss. Dune management activities would avoid further sand losses due to human-related losses of dune habitat as well as accelerate the replacement of sand through natural processes over time, which is consistent with the restoration objective. Dune management activities are also consistent with community objectives as evidenced by the protection afforded to dune habitats by Federal, State, and local laws and ordinances and the significant public investment in dune walkovers already apparent in the affected community.

Dune management activities are technically feasible and cost-effective. Although dune walkovers can be more expensive than some of the activities under this alternative, walkovers can provide protection to dune communities for up to 20 years if constructed using durable, ultraviolet radiation (UV) resistant recycled materials. Removing exotic species from dune habitat can also be a more expensive activity than constructing dune walkovers, particularly if heavy machinery is needed to eliminate mature stands of invasive trees. Project costs under this alternative could vary substantially depending on the particular action proposed. Project costs will reflect such factors as the scope of the activity or the extent to which it would involve design, permitting, material and/or construction costs. The proposal for dune walkovers at Fort De Soto Park noted below has a cost estimate of approximately $135,000.

The potential for additional resource injury is low. Construction impacts are likely to occur, but only within the degraded area targeted for restoration and not within healthy areas. Dune management activities tend to be sustainable activities, requiring only modest maintenance over time. Numerous opportunities to implement dune management activities exist within the affected communities. The Trustees know of one project consistent with this alternative, but many others may exist. Staff from Fort De Soto, a Pinellas County Park, have identified five sites in the park, where unrestricted access to dunes is causing sand and dune vegetation loss. These five sites are in need of dune walkovers (personal communication Bob Browning, Ft. De Soto Park). These actions are technically feasible and require minimal up-front planning, permitting, or other site requirements.

3.3.2 Ecological and Socio-Economic Impacts

Management activities such as educational signage or establishment of restricted areas are likely to have only beneficial consequences. Other activities such as construction of dune walkovers, and removal of exotic plants may involve some temporary disturbance to the beach landscape, including noise and exhaust from machinery which may disturb birds and/or wildlife in the immediate vicinity. Walkovers serve to concentrate recreational activities in areas better suited or equipped to accommodate recreational traffic, thereby alleviating environmental impacts across broader areas.

In the event of medical emergencies, dune walkovers also facilitate access to recreational shorelines by emergency personnel and may also improve safety if they draw pedestrians away from roads and automobile traffic. The addition of dune walkovers in selected areas would not have significant socio-economic impacts.

3.4 Non-Preferred Alternatives

This section describes other restoration alternatives considered by the Trustees in developing this Draft Supplement, but found following evaluation, to be inappropriate or less suited for use as a beach sand restoration action.

Overland Trucking of Sand: This alternative involves trucking in a volume of beach sand from a land-based sand quarry or other source with equivalent quality sand and placing it directly on one or more affected beach areas. This alternative was considered, but rejected in the DARP/EA Vol. I largely due to undesirable impacts associated with having large trucks moving into and out of beach communities and the potential costs of implementing this alternative. These impacts include increases in noise and traffic and the exhaust from large diesel trucks, which are not consistent with the objectives of beach communities whose economic base derives from being a resort and vacation destination. The potential impacts to the transportation infrastructure within the beach communities, and the lack of benefits to other natural resources, were also significant concerns. The Trustees reconsidered this alternative in developing this Draft Supplement, but found its selection was not warranted for the same reasons the alternative was rejected in the DARP/EA Vol. I.

Construct groins or jetties: This alternative involves installing man-made structures which function to trap sand as it naturally passes by shorelines, transported by wave energy and currents.

Jetties are structures constructed with large boulders perpendicular to the shoreline and are intended to protect a harbor entrance. They usually extend hundreds of feet offshore. Groins are similar to jetties in that they are built perpendicular to the shoreline, but they are located along a shoreline with the sole purpose of stopping erosion and trapping sand. Both types of structures interfere with sand transport by waves and currents and build adjacent beaches. Although these structures can increase beach areas where they have been placed, they can also have the undesired effect of depriving sand to other beaches that would benefit from the undisturbed natural sand transport process, which is contrary to the interest and objectives of some beach communities. Moreover, the cost of construction of these types of structures is substantially higher than the cost of any other restoration alternative considered, due to the degree of engineering, design and other planning required, and would likely exceed the funds available to provide for beach sand restoration.

Creation of Near-shore Oyster Habitat: This alternative involves creation of a near-shore oyster reef as a means of creating shoreline conditions suitable for sand accretion, accelerating what is otherwise a natural process for returning sand to beaches. An oyster reef can also protect a shoreline from erosion by reducing wave energy, which can help avoid or reduce future losses of sand due to wave action. The alternative involves the placement of fossilized shell or other appropriate material on the sea floor close enough to the shore to promote sand accretion and to reduce wave energy from wind and boat traffic. Siting would be limited to areas of sandy bottom in order to minimize or eliminate the potential for additional natural resource injury.

Using an oyster reef to accrete sand is consistent with the restoration objective of

replacing lost sand, but not consistent with the Trustees intent to replace the lost sand on-site. High wave energy conditions immediately offshore of the Gulf beaches affected by the spill make it difficult to establish an oyster reef there. A more likely and feasible location for an oyster reef project is within Boca Ciega Bay. While an oyster reef in Boca Ciega Bay might prevent further erosion of sand along adjacent shorelines, sand accretion in Boca Ciega Bay does not benefit any beaches suffering sand loss and is, therefore, not appropriate for selection as a primary restoration action.

No Action Alternative: This alternative would involve no further direct intervention to restore lost beach sand. Under this alternative, ongoing management programs and natural recovery processes would be the only processes available to restore lost sand to affected beaches. However, most of the affected beach areas require periodic beach renourishment to maintain them for recreation and as coastal erosion barriers or buffers, due to ongoing erosion. Under these circumstances, the lost sand is unlikely to be restored except by supplemental action. Further, this alternative does not provide for the use of the damages recovered for restoration of the lost beach sand, which the Trustees are lawfully required to apply, if possible, to the purpose.

3.5 Projects Eligible for Funding under Preferred Restoration Alternatives

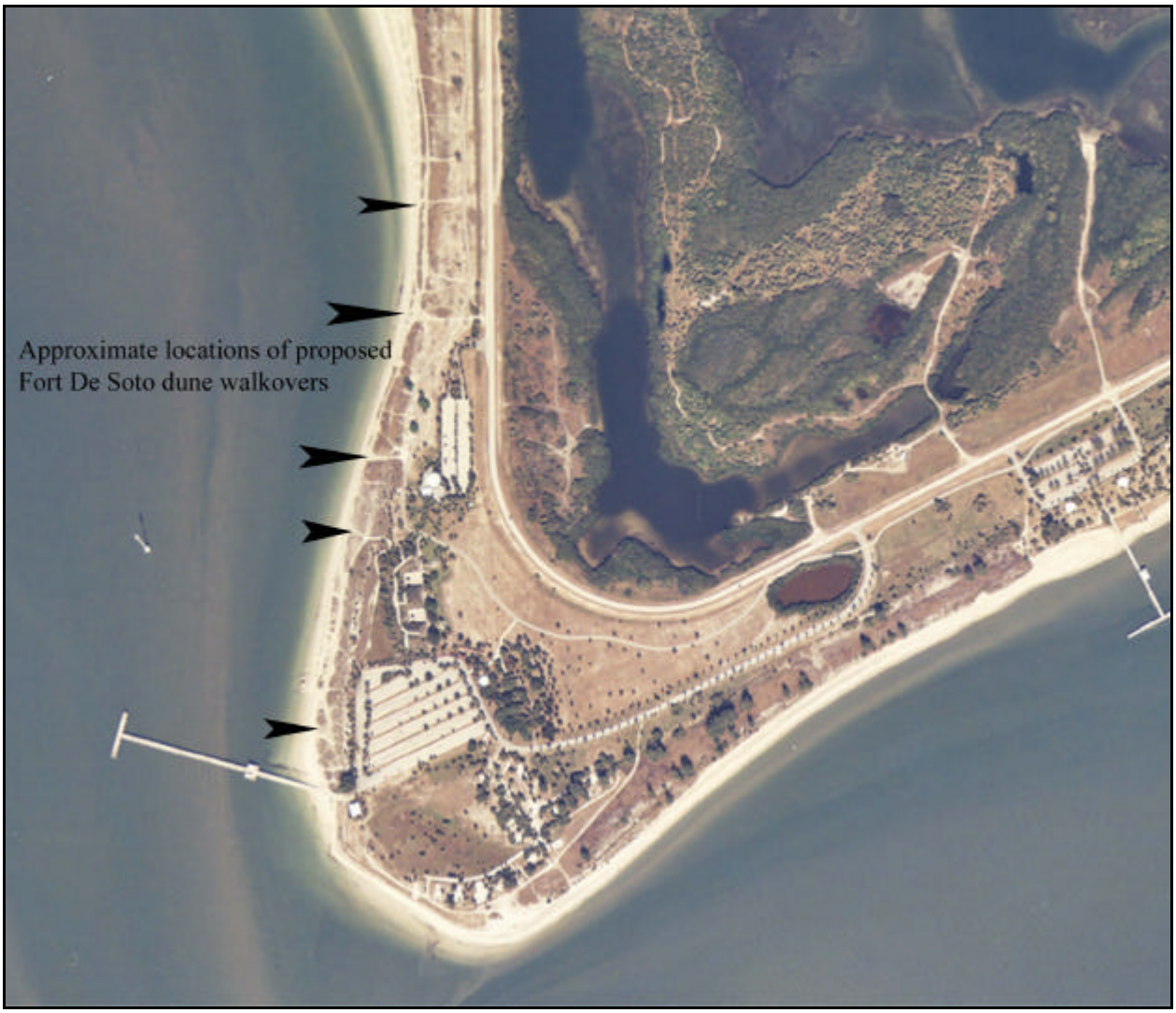
Two restoration project proposals consistent with the preferred restoration alternatives are currently known to the Trustees and eligible for selection under the proposed revisions to the restoration plan. Based on the anticipated cost of each project, the remaining damages recovered for the lost beach sand would be sufficient to implement both projects.

Dune Restoration Project: This project is proposed by the City of Treasure Island. It would be implemented on city-owned property approximately 150 yards south of the Sunset Vista Trailhead Park. This property is currently being used for one of two beach volleyball courts by a private restaurant (Figure 1). Dunes will be shaped with heavy machinery, planted with native dune vegetation and watered for a brief period of time to establish the dune vegetation. The dunes will be located to provide erosion protection. The City estimates the cost of the project, including design, construction, plant material and maintenance, at approximately $60,000.

Figure 1.

Dune Walkovers at Fort De Soto Park: This project involves the construction of up to five dune walkovers at Fort De Soto Park. The walkovers would be constructed in areas where the public has walked through established dunes, and continues to do so (Figure 2). Pedestrian traffic through these sites has eroded deep footpaths through the dunes and eliminated wide swaths of vegetation. Design, permitting and construction costs of the dune walkovers at Fort De Soto Park are estimated at approximately $135,000.

Figure 2.



Additional restoration alternatives or project proposals may be identified during the period for public review of this document. The Trustees will select specific projects for implementation consistent with the restoration plan revisions approved in the Final Supplement. These decisions will be described in the Final Supplement. Information provided by the municipalities or individuals with project proposals submitted during the public comment period will be used by the Trustees in making project funding decisions.

4.0 COMPLIANCE WITH OTHER KEY STATUTES, REGULATIONS, AND POLICIES

Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2701 *et seq*.; 15 C.F.R. Part 990.

The DARP/EA Vol. I was developed pursuant to OPA to assess natural injuries and losses caused by the Spill and to define restoration actions appropriate to address those injuries, as compensation for those losses. The restoration plan in that document was developed with substantial opportunity for public input, in part through release of a Draft DARP/EA Vol. I for public review and comment, in accordance with the requirements ofOPA relating to public participation in the restoration planning process. Public participation is also required to revise that plan. The Draft Supplement was prepared to provide for public participation in that process, to comply with OPA provisions relating to the use of recovered damages, and in accordance with the restoration planning guidance found in 15 C.F.R. Part 990.

National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*.; 40 C.F.R. Parts 1500-1508

NEPA requires the Federal government to perform an Environmental Assessment (EA) in planning for any action with potential environmental consequences. In considering the restoration actions proposed herein, this Draft Supplement incorporates an EA of the restoration alternatives considered, in accordance with NEPA. Additional information on potential environmental impacts will be added as necessary when the revised restoration plan is finalized. Comments and input from the public are an important component of the NEPA process, and this draft is also being utilized to assist in the public review process.

Federal Water Pollution Control Act, commonly called the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq*.

The Clean Water Act, Section 311, is also a source of authority for seeking natural resource damages. Like OPA, this statute provides for planning appropriate restoration actions using recovered damages, as delineated in regulations promulgated by the Department of the Interior.

Section 404 of the law requires a permit for the disposal of material into navigable waters. The Army Corps of Engineers administers the program. A restoration project that moves significant amounts of material into or out of waters or wetlands requires a 404 permit. A CWA Section 404 permit will be obtained, if required, in implementing any restoration actions selected in the Final Supplement to the DARP/EA Vol. I.

Coastal Zone Management Act (CZMA), 16 U.S.C. § 1451 *et seq*.; 15 C.F.R. 923

The goal of the CZMA is to encourage appropriate management of coastal resources by requiring states to develop Coastal Management Plans (CMPs). The planning process is meant to include preservation, protection and development of resources, with provisions governing the restoration and enhancement of coastal environments. Under Section 1456 of CZMA, Federal actions are required to comply with approved State CMPs. NOAA has reviewed this Draft Supplement to

the DARP/EA Vol. I for consistency with the Florida Coastal Management Program and believes the restoration actions proposed herein are consistent with that plan. NOAA is submitting this determination of consistency to the Florida Department of Community Affairs for review coincident with the public release of this document.

Endangered Species Act (ESA), 16 U.S.C. § 1531 *et seq*.; 50 C.F.R. Parts 17, 222, 224.

The ESA directs all Federal agencies to assist in the conservation of threatened and endangered species to the extent their authority allows. Protection of wildlife and preservation of habitat are the central objectives in this effort. The Department of Commerce (through NOAA) and the Department of the Interior (through USFWS) publish lists of endangered and threatened species. Section 7 of the Act requires that Federal agencies consult with these departments to minimize the effects of Federal actions on these listed species.

The restoration actions proposed in this Draft Supplement to the DARP/EA Vol. I are not expected to adversely impact any species listed under the ESA. Prior to implementation of any project under the final revised restoration plan, the Trustees will initiate consultation with the appropriate agencies pursuant to the ESA and ensure that such restoration actions will be in accordance with all applicable provisions of the Act.

Fish and Wildlife Conservation Act, 16 U.S.C. § 2901 *et seq*.

The proposed restoration projects will not encourage or discourage the conservation of non-game fish and wildlife.

Fish and Wildlife Coordination Act (FWCA), 16 § U.S.C. 661 *et seq*.

The FWCA requires that Federal agencies consult with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and State wildlife agencies regarding activities that affect any aquatic environments. This consultation is generally incorporated into the compliance process associated with other relevant statutes, such as CWA and NEPA. As part of the final restoration planning process, the Trustees will initiate consultation with the appropriate agencies pursuant to this statute.

Magnuson Fishery Conservation and Management Act, 16 U.S.C. § 1801 *et seq*.

The Magnuson Fishery Conservation and Management Act provides for stewardship of the Nation's fishery resources within the Exclusive Economic Zone, covering all U.S. coastal waters out to a boundary at 200 miles. The resource management goal is to achieve and maintain the optimum yield from U.S. marine fisheries. The Act also establishes a program to promote the protection of Essential Fish Habitat (EFH) in the planning of Federal actions. After EFH has been described and identified in fishery management plans by the regional fishery management councils, Federal agencies are obligated to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

The Trustees do not believe that the restoration actions proposed herein will adversely impact any EFH designated pursuant to the Act. However, the Trustees will initiate appropriate consultation with the National Marine Fisheries Service, Southeast Habitat Protection Division and finalize the EFH determination after specific restoration project sites are identified and further project details are developed.

Marine Mammal Protection Act, 16 U.S.C. § 1361 *et seq*.

The Marine Mammal Protection Act calls for long-term management and research programs regarding marine mammals. It places a moratorium on the taking and importation of marine mammals and marine mammal products, with limited exceptions. The Department of Commerce is responsible for whales, porpoises, seals, and sea lions. The Department of the Interior is responsible for all other marine mammals. The proposed restoration actions will not have an adverse effect on marine mammals.

Migratory Bird Conservation Act, 126 U.S.C. § 715 *et seq*.

The proposed restoration actions will have no adverse effect on migratory birds.

Archeological Resources Protection Act, 16 U.S.C. § 470 *et seq*.

The Trustees have no information indicating that any cultural resources, or that any sites listed or eligible for listing on the National Register of Historic Places, exist within the areas where restoration projects under this proposed plan may be sited. The Florida State Historical Preservation Officer will be consulted pursuant to this Act as specific restoration projects are identified consistent with a final restoration plan and before such projects are implemented to ensure that State cultural or historic resources will not be adversely affected by restoration actions.

Anadromous Fish Conservation Act, 16 U.S.C. § 757

The proposed restoration actions will have no adverse effect on anadromous fish species.

Rivers and Harbors Act of 1899, 33 U.S.C. § 403 *et seq*., Section 10

The Rivers and Harbors Act regulates development and use of the nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests the Army Corps of Engineers with the authority to regulate discharges of fill and other alterations. Restoration actions that require Section 404 Clean Water Act permits are also likely to require permits under Section 10 of the Rivers and Harbors Act. A single permit usually serves for both. Any permits under the Act, if required, will be obtained prior to implementing any restoration action selected in the Final Supplement to the DARP/EA Vol. I.

Executive Order Number 11514 (34 FR 8693) - Protection and Enhancement of Environmental Quality

A Draft Environmental Assessment is integrated within this Draft Supplement to the DARP/EA Vol. I and environmental coordination is taking place as required by NEPA.

Executive Order Number 11990 (42 FR 26961) - Protection of Wetlands

The proposed restoration actions will not adversely affect wetlands or the services they provide.

Executive Order Number 12898 - Environmental Justice

This Executive Order requires each Federal agency to identify and address any policy or planning impacts that disproportionately affect the health and environment in low-income or minority populations. EPA and the Council on Environmental Quality have emphasized the importance of incorporating environmental justice review into the analyses conducted by Federal agencies under NEPA and of developing appropriate mitigation measures. The Trustees have concluded that there would be no adverse impacts on low-income or minority communities due to the proposed restoration actions.

Executive Order Number 12962 (60 FR 30769) - Recreational Fisheries

The proposed restoration actions will not adversely affect recreational fisheries and the services they provide.

5.0 FINDING OF NO SIGNIFICANT IMPACT

Having reviewed the attached environmental assessment and the available information relative to the Restoration Plan, I have determined that there will be no significant environmental impacts from the proposed actions. Accordingly, preparation of an environmental impact statement on these issues is not required by Section 102 (2) of the National Environmental Policy Act or its implementing regulations.

_____ Date _____

William T. Hogarth
Acting Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U. S. Department of Commerce

6.0 LIST OF PREPARERS

National Oceanic and Atmospheric Administration,
U. S. Department of Commerce
Stephanie Fluke
John Iliff
Dolores Toscano

Florida Dept. of Environmental Protection
Maureen Malvern
Jane Urquhart-Donnelly
Philip Wieczynski

U. S. Fish and Wildlife Service
U. S. Department of the Interior
Diane Beeman
Holly Deal
Brian Pridgeon